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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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BLAKELY SOKOLOFF TAYLOR & ZAFMAN
12400 WILSHIRE BOULEVARD
7TH FLOOR
LOS ANGELES, CA 90025

EXAMINER

HARPER, KEVIN C

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 05/17/2004

22

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/164,429

Applicant(s)

CHUNG ET AL.

Examiner

Kevin C. Harper

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 50-61, 72-83 and 92-160 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 50-61, 72-83 and 92-160 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 21.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

Response to Arguments

1. Applicant's arguments filed February 23, 2004, have been fully considered but they are not persuasive. Applicant argued that Binkerd does not disclose the replacement of an off-hook signal with an on-hook signal as a consequence of a message having been received from a packet network. Examiner agrees with applicant in this description of Binkerd; however, Chang discloses a local interface in communication with a PBX (Figure 1) for receiving an indication of a network condition at a remote interface across a packet network (Figure 5B, step 150), and in combination with Binkerd, suggests providing an off-hook and on-hook signal (Binkerd, Figure 1, items 102 and 109; Figure 8, step 801) at the local interface as a consequence of the indication of the network condition, where the off-hook and on-hook signal provide the appropriate notification of the status of the local interface.
2. Applicant did not appear to address the previous rejection under 35 USC 112. This rejection is repeated below.

Claim Objections

3. Claims 50-61 and 72-83 are objected to because in independent claims 50 and 72, the first ring signal and the off-hook signal are generated at the same interface. In Figure 43, the first interface appears to be at a location on the left side of item 4300 (page 61, lines 26-27) and the second interface appears to be at a location on the right side of 4300 (page 62, lines 2-3). As described in the specification, the first ring signal is generated at the first telephone interface and not at the second interface which establishes a connection over the packet network (page 62, line

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4). (note: in response to applicant's comments, the objection statement has been changed to read "are generated" instead of "are not generated")

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 53-54, 56-57, 75-76, 78-79 and 106-107 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Regarding claims 53-54, 56-57, 75-76, 78-79 and 106-107, the second telephone interface or remote telephone interface (Figures 43 and 45; page 61, line 26 through page 63, line 12) does not reside at a central office or second PBX. The interface is external to the central office or second PBX as described in the specification (note: the interface - Figure 42, item 4208 or 4216 or Figure 45, item 4502 - is described as a "remote off-premise telephone extension" for Figure 42, items 4208 and 4216, and is separate from a PBX or central office (item 4512) in Figure 45).

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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Claims 50, 52, 55, 58, 72, 74, 77, 80, 92, 94, 100, 102, 108-112, 119-124, 128, 130-135, 139, 141-146, 150-155 and 159 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al. (US 6,118,864) in view of Guy et al. (US 5,940,479) and Binkerd et al. (US 4,623,760).

5. Regarding claims 50, 72, 92, 100, 108, 120, 128, 130-131, 139, 141-142 and 150, Chang discloses a method comprising initiating a call to a remote telephone interface (Figure 1, item 19) at a first telephone interface (item 36; Figure 2A step 72), establishing a connection at a second interface (Figure 1, items 22 and 8) toward a remote interface over a packet data network (item 32, 34 and 4; col. 3, lines 30-32), generating an inherent second ring signal and starting an inherent timer for measuring a time period that the second ring signal is applied (Figure 5B, step 148; note: ring-no-answer), ceasing the second ring signal (note: ring-no-answer) and sending a message a message through the packet network (Figure 5B, step 150). However, Chang does not disclose generating a first ring signal at a first interface (as understood in light of the above claim objection). Guy discloses transmitting a ring signal from one device to another (Figure 1, items 101B and 128; col. 8, lines 10-13). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to generate a ring signal at a first interface in the invention of Chang to indicate a desire to make a connection between devices. Further, Chang in view of Guy does not disclose generating an off-hook signal at the second interface or ceasing the off-hook signal and generating an on-hook signal at the second interface. Binkerd discloses providing an off-hook signal and then removing the off-hook signal and providing an on-hook signal to indicate the status of a line (Figure 1, items 102 and 109; Figure 8, timing diagram 801; Figure 9; col. 16, lines 38-42 and col. 17, lines 7-9). Therefore, it would have been obvious to

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one skilled in the art at the time the invention was made to generate an off-hook signal and then cease an off-hook signal and generate an on-hook signal at the second telephone interface in the invention of Chang in view of Guy in order to communicate the line status between devices.

Further regarding claims 131 and 139, the system includes a computer readable medium (Figure 1B, memory) having instructions for performing the method (Figure 1B, CPU).

6. Regarding claim 119, the system of Chang comprises a MAC (items 8, 22 and 32) for receiving a data stream and a voice channel, packetizing the voice channel and multiplexing the data stream and packetized voice channel (Figure 1, item 34) over a trunk which is inherently configurable (col. 3, lines 35-38 and 44-46). The MAC comprises an inherent CPU coupled to ports (items 38 and 24 and connection to clients and router 34) and a memory (col. 5, lines 25-32).

7. Regarding claims 151 and 159, these limitations have been addressed in the rejection of claims 108 and 119 above.

8. Regarding claims 52, 55, 74, 77 and 152-154, the first interface resides at a PBX or central office (Chang, Figure 1A, item 36; Figure 1D, item 50).

9. Regarding claims 58, 80, 94, 102, 115, 124, 135, 146 and 155, the network is an IP network (Chang, col. 3, lines 45-47).

10. Regarding claim 109, the second system comprises a VOPS control system (Chang, Figure 1C, items 2 and 39).

11. Regarding claims 110-112, the third interface resides at a PBX or central office/PSTN (Chang, Figure 1A, item 36; Figure 1D, item 50).

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12. Regarding claims 121-123, 132-134 and 143-145, a ring signal to denote an indication of an incoming call is provided to a PBX or central office/PSTN (Chang, Figure 1A, item 36; Figure 1d, item 50; Figure 5B, step 148).

Claims 51, 73, 93, 101 and 113-114 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Guy and Binkerd, as applied to claims 50, 72, 102 or 108 above, and further in view of Meubus et al. (US 5,793,858).

13. Regarding claims 51, 73, 93, 101 and 113-114, Chang in view of Guy and Binkerd does not disclose that that a timer for a ring-no-answer lasts a particular duration. Meubus discloses that a configurable and fixed timer lasts preferably up to 72 seconds. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have a ring-no-answer timer for up to 72 seconds in the invention of Chang in view of Guy and Binkerd in order to allow a sufficient time for a called telephone to be answered. Further, Chang in view of Guy, Binkerd, and Meubus does not disclose that the timer lasts 2 to 3 minutes. One skilled in the art would recognize that a ring-no-answer timer of 2 to 3 minutes allows additional time for called telephone to be answered (MPEP 2144.05 (I) (II)). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have a timer of 2 to 3 minutes in the invention of Chang in view of Guy, Binkerd and Meubus.

Claims 59-61, 81-83 95-97, 103-105, 116-118, 125-127, 136-138, 147-149 and 156-158 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Guy and Binkerd, as applied to claims 50, 72 108, 120, 131, 142 or 151 above, and further in view of English et al. (US 5,305,308).

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14. Regarding claims 59-61, 81-83, 95-97, 103-105, 116-118, 125-127, 136-138, 147-149 and 156-158, Chang in view of Guy and Binkerd does not disclose that the packet network uses frame relay, HDLC or ATM. English discloses transmitting voice information over a network that uses frame relay, HDLC or ATM (col. 3, lines 50-55; col. 12, lines 9-20; and col. 45, lines 59-61). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to use frame relay, HDLC or ATM in the packet network of Chang in view of Guy and Binkerd to use a preferred, suitable and standardized alternative protocol in a packet network.

Claims 53-54, 56-57, 75-76, 78-79 and 106-107 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Guy and Binkerd, as applied to claims 52, 55, 74, 77, 92 or 100, above, and further in view of Fuentes (US 5,812,541) or Lowry et al. (US 5,970,066).

15. Regarding claims 53-54, 56-57, 75-76, 78-79 and 106-107, Chang in view of Guy and Binkerd does not disclose that the second or remote telephone interface is located at a PBX or central office. Fuentes and Lowry disclose an interface to a packet network located at a PBX (Figure 1, items 1 and 19) and central office (Figure 1, items 14 and 52), respectively.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to locate an interface to a packet network at a PBX or central office in the invention of Chang in view of Guy and Binkerd in order to conveniently control and administer the interconnection at the location of the PBX or central office.

Claims 129, 140 and 160 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Guy and Binkerd, as applied to claims 120, 131 or 151, above, and further in view of Menon et al. (US 6,208,627).

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16. Regarding claims 129, 140 and 160, Chang discloses using DTMF digits from a caller to determine a destination. However, Chang in view of Guy and Binkerd does not disclose using a secondary dial tone. Menon discloses using a secondary dial tone in order to notify a user that an outgoing trunk from a PBX has been seized (col. 44, lines 35-45). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have a secondary dial tone in the invention of Chang in view of Guy and Binkerd in order to provide a dial tone for local calls within the PBX and another dial tone for calls outside the PBX.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 703-305-0139. The examiner can normally be reached weekdays from 11:30 AM to 8:00 PM ET.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao, can be reached at 703-308-5463. The centralized fax number for the Patent Office is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see pair.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin C. Harper



May 15, 2004

Seema S. Rao
SEEMA S. RAO 5/17/04
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800